PRIMAflex™ is the first choice flat sheet in the building industry for ceiling.

**here's why:**

**PRIMAflex™ Technical Specification**

- **Surface Description**: Smooth, Flat & Uniform
- **Surface Condition**: Natural or Pre-coated
- **Thicknesses**: 3.2/4.5/6.0 mm
- **Sizes**: 595mm x 595 mm, 603mm x 603 mm, 595mm x 1195 mm, 603mm x 1213 mm
- **Nominal Density**: Dry = min. 1300 kg/m³
- **Bending Strength (Modulus of Rapture)**: 1390 kg/m³
- **Modulus of Elasticity (MoE) - average**: 16 MPa
- **Thermal Conductivity**: 0.24 W/mK
- **Moisture Content**: EMC = 7%
- **Moisture Movement**: 0.08%
- **Fire Rating**: Class O
- **Fungus Attack**: Passed
- **Termite Attack**: Passed
- **Frost Resistance**: Passed
- **Impact**: Passed
- **Water**: Passed
- **Termite**: Passed
- **Fire**: Passed

**Fire Rating**

- **Fire Rating**: MS1296
**Jointing (Ceiling & Eaves Lining)**

Alternative PRIMAflex™ jointing systems include 'Expressed Joint' and 'Timber Batten Joint' as shown in Fig. 2 & 3.

**Painting & Finishing**

For best result, decorate PRIMAflex™ with 2 coats of 100% quality water-based acrylic paint. Do not use solvent-based paint. In all cases, coating manufacturer's recommendation must be adhered to.

**Storage & Handling**

Sheets should be stacked on level ground and kept dry and under cover prior to fixing.

Damp sheets must be allowed to dry to equilibrium moisture content (EMC) before fixing.

**Cutting Methods**

Sheets up to 6mm thick may be cut using any scribing tool or special tungsten-tipped scoring knife;

- Score the face of the sheet, repeating the action to obtain a depth of about 1/3 of sheet thickness.
- Snap the off-cut upward to achieve cut. If the edge is rough, trim with a rasp.

For sheet thickness of 6mm & above and when massive sheet cutting is involved, use power tool equipped with tungsten carbide tips circular saw.
The Product

PRIMAflex™ is an autoclaved cellulose fibre reinforced cement flat sheet manufactured with state-of-the-art technology to provide superior performance and long lasting durability.

PRIMAflex™ sheets comply with MS1296:1992 - specification for fibre cement flat sheets.

Product Composition

PRIMAflex™ is manufactured from top grade cellulose fibre, finely ground sand, Portland cement and water. PRIMAflex™ products do not contain asbestos, glass fibres or formaldehyde are therefore not hazardous to health.

Application and Standard Sizes

PRIMAflex™ ceiling application may be selected from the table below based on thickness performance criteria specified by the designer.

<table>
<thead>
<tr>
<th>Application</th>
<th>PRIMAflex™ Sheet Thickness (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceiling &amp; Eaves Lining</td>
<td>3.2, 4.5 and 6.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thickness (mm)</th>
<th>610 x 1220</th>
<th>1220 x 1220</th>
<th>1220 x 2440</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>3.2</td>
<td>6.4</td>
<td>-</td>
</tr>
<tr>
<td>4.5</td>
<td>4.7</td>
<td>9.3</td>
<td>18.7</td>
</tr>
<tr>
<td>6.0</td>
<td>6.3</td>
<td>12.5</td>
<td>25.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support Grid Dimension</th>
<th>PRIMAflex™ Sheet Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>600mm x 600mm</td>
<td>595mm x 595mm</td>
</tr>
<tr>
<td>610mm x 610mm</td>
<td>603mm x 603mm</td>
</tr>
<tr>
<td>600mm x 1200mm</td>
<td>595mm x 1195mm</td>
</tr>
<tr>
<td>610mm x 1220mm</td>
<td>603mm x 1213mm</td>
</tr>
</tbody>
</table>

Fire Resistance

PRIMAflex™ is classified as a Class 'O' building material under the Malaysian Uniform Building By-laws 1984.

When tested in accordance with BS 476; Fire tests on building material and structure, PRIMAflex™ achieves the following results:-

- Fire Propagation - Fire Propagation Index, I<1 (BS 476 Part 6)
- Surface Spread of Flame - Class 1 (BS 476 Part 7)

Fixing Instruction (Ceiling & Eaves Lining)

Fix fastener at a minimum 12mm from the board edge and 50mm from sheet corner. Nails should be spaced at 200mm centres along sheet perimeter and 300mm centres at intermediate framing. Use 2.0 Ø x 25mm galvanised wire nails for fixing 3.2mm and 4.5mm thick sheets. Drive nails flush with sheet surface. Ceiling support should be spaced not more than 610mm centres. Refer Fig. 1.

Note: For complete and comprehensive installation details, please refer to our Technical Services Department.
Hume Cemboard Industries Sdn Bhd is a leading manufacturer and supplier of fibre cement boards to the building industry in Malaysia and having its products distributed to over 60 countries worldwide. The fibre cement boards are marketed under PRIMA® brand and trade name. PRIMAflex® 3.2mm to 6.0mm thicknesses are suitable for ceiling and eaves / soffit lining applications.

What is Fibre Cement?

Fibre cement is a simple abbreviation for Fibre Reinforced Cement (FRC). Fibre cement building materials were developed in the early 1980s, using alternative reinforcing materials to create asbestos-free cement-based building products. Fibre cement products are mixture of:

- Cellulose fibre, from plantation-grown Radiata Pine trees
- Portland Cement
- Refined Sand
- Water
- Chemical additives in small amounts are used to help in process, or provide the products with specific characteristics. The FRC autoclaving manufacturing process produces a durable, easily worked, aesthetically pleasing product with superior impact and water resistant inherent quality.

PRIMA® fibre cement boards ranging from 3.2mm to 16mm thicknesses are tested and proven products that will not burn, are resistant to permanent water and termite damage and when installed as directed, resistant to rotting and warping. The boards are easy to work with and they are particularly maintenance-free, making them the ideal choice for professional builders, designers and architects, and the do-it-yourself (handyman) enthusiasts.

PRIMA® multipurpose fibre cement boards are used extensively in renovations and the construction of new residential and commercials buildings in the following applications:

- Ceilings
- Fire and Acoustic Walls
- External Cladding
- Bracing
- Internal Lining, Floors and Walls
- Fencing
- Wet Area Lining - Bathroom
- Decorative Elements
- Eaves, Verandahs and Carport

PRIMA® products are tested and certified: